Amendments to the specification:

Please replace paragraph 3 on page 11 in the specification of the original application with the following amended paragraph:

[Paragraph 3 on page 11] In one approach, a semiconductor device (10) is built in a layer-by-layer manner as shown schematically in Figure 4. The sequence is from cathode to anode, which is opposite to that adapted by the conventional method (compared to Figure 3). In other words, the device (10) has an inverted device structure. Although the device (10) is still built in a layer-by-layer manner, this inventive approach makes all layers including both electrode layers to be fabricated under non-vacuum environment. First, an ~~optional~~ conducting seed layer (19) is deposited on the first substrate (13). A low work function first electrode (14) or a cathode is then constructed by electrodeposition method as detailed above in this invention. After this, all of the necessary organic layers (15 and/or 18.) are successively applied onto this low work function first electrode (14) by solution processing. Finally, a high work function electrode (17) is deposited onto the organic semiconductor layer (18) with another non-vacuum processing technique, either electrodeposition or solution processing, as detailed above in this invention. A protective layer (16) may be further deposited on this high work function second electrode (17) to form the final device (10) by coating or with the assistance of adhesives. In this invention, we refer this approach as the "layer by layer (LBL)" mode.